



PENMUL™ L745

Page: 1 of 8
Date Prepared: October 4, 2016
MSDS No.: 4831

SECTION 1: IDENTIFICATION

Product name: PENMUL L745

Recommended use: Cleanin, degreasing, asphalt cleaning and extraction agent

Physcial Description: Clear water white liquid to pale amber liquid with citrus odor

Generic Ingredients: Hydrocarbon solvent, d-limonene, and surfactant

Manufacturer:

Penetone Corporation
700 Gotham Parkway
Carlstadt, NJ 07072
800-631-1652 or 201-567-3000

Business Contact:

Customer Service
800-631-1652 x2607 or 2272
Product Safety
800-631-1652 x2211 or 2257

Emergency Phone Numbers: PENETONE 201-567-3000 CHEMTREC 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

<p>Health: Aspiration hazard: 1 Skin sensitization: 1 Eye irritation: 2B Skin irritation: 2</p>	<p>Specific target organ toxicity - single exposure: 3</p> <p>Physical: Flammable liquid: 4</p>
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DANGER!

May Be Fatal If Swallowed and Enters Airways.
May Cause Drowsiness or Dizziness.
May Cause Allergic Skin Reaction.
Combustible Liquid.



<p>Precautionary Statements:</p>	
<p><u>Prevention:</u> Keep away from flames and hot surfaces.--No smoking. Wear protective gloves, eye protection, and face protection. Wash hands and exposed skin thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Avoid breathing fumes, vapors or mists if inhalable mists occur during use. Use only outdoors or in a well-ventilated area.</p> <p><u>Response:</u> <i>In case of fire:</i> Use dry chemical, carbon dioxide, water spray, water fog, or foam. Do not use solid water stream as this may spread the fire. <i>If in eyes:</i> Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. <i>If on skin:</i> Wash with plenty of water. A mild soap may be used. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.</p>	<p><i>If inhaled:</i> Remove person to fresh air and keep comfortable for breathing. Call a poison center, doctor, emergency room or 911 if you feel unwell. <i>If swallowed:</i> Immediately call a poison center, doctor, emergency room, or 911. Do NOT induce vomiting.</p> <p><u>Storage:</u> Store locked up. Store in a well ventilated place. Keep cool. Keep container tightly closed.</p> <p><u>Disposal:</u> Dispose of contents/container in accordance with local, regional, and national regulations (see Sections 13 and 15 of SDS for disposal and reporting requirements).</p>



PENMUL™ L745

Page: 2 of 8
Date Prepared: October 4, 2016
MSDS No.: 4831

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Concentration Wt% (1)
Aliphatic petroleum naphtha	64742-47-8	70-90
d-Limonene	5989-27-5	10-20
Ethoxylated nonylphenol	127087-87-0	1-10

(1) Exact percentages being withheld under trade secret provision of OSHA HCS 1910.1200(i)

SECTION 4: FIRST-AID MEASURES

General Description of Symptoms & First-Aid Measures

Most likely work-place exposure routes will be *skin contact* or *inhalation*.

For *skin contact*, typically no immediate effects will be observed. Slight reddening or minor irritation could develop some time after exposure if product is washed off. For sensitive individuals, a rash may appear.

Inhalation exposure may produce varied effects, particularly if exposure occurs above the recommended workplace exposure limits (see SECTION 8). Typical symptoms would include headaches, dizziness, and drowsiness. In extreme cases, unconsciousness and other central nervous effects may occur.

Eyes

If in eyes: Rinse cautiously with water for several minutes. If contact lenses present, remove them if easy to do. Continue rinsing for several minutes. If eye irritation persists: Get medical advice or attention. Penetone recommends that after any eye exposure and initial treatment a physician be seen immediately.

Ingestion

If swallowed: Immediately call a poison center, doctor, physician or other competent medical authority. Product presents an aspiration hazard. **DO NOT INDUCE VOMITING.**

Inhalation

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center, doctor, physician or other competent medical authority if you feel unwell.

Skin

If on skin (or hair): Wash with plenty of water or a mild soap. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice or attention.

Special Treatment / Other

None

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties

Classification: 4

Flash Point: 145°F TCC

Autoignition Temperature: about 440°F (227°C)

Lower Flammable Limit: about 0.6% **Upper Flammable Limit:** about 6%

Specific Hazards

Combustible liquid. Can form combustible mixtures at or above the flash point.

Extinguishing Media

Suitable: SMALL FIRE: Use dry chemical, carbon dioxide (CO₂), water spray or regular foam. LARGE FIRE: water spray, water fog, or foam.

Unsuitable: Do not use solid water stream as this may spread fire.



PENMUL™ L745

Page: 3 of 8
Date Prepared: October 4, 2016
MSDS No.: 4831

Protection & Precautions for Firefighters

Protective Equipment & Clothing: Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters protective clothing will only provide limited protection.

Fire Fighting Guidance: Cool containers with flooding quantities of water until well after fire is out. Move containers from fire area if you can do it safely. Dike fire control water for later disposal; do not scatter material. Containers can expand and explode under fire conditions due to vapor buildup. Always stay away from containers engulfed in fire.

Hazardous Combustion Products: Smoke, fumes, and oxides of carbon.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Land Spill

Eliminate sources of ignition. Do not touch or walk through spilled material. Stop leak if you can do it safely. For large spills, dike and pump into properly labeled containers for reclamation or disposal. For small spill, soak up with absorbent material and place in properly labeled containers for disposal.

Water Spill

Product forms emulsion with water which may make cleanup difficult. Avoid agitation to minimize emulsion formation. Remove product from water surface by skimming or with suitable absorbents. Put into properly labeled containers for reclamation or disposal. If allowed by local environmental regulatory agencies, you may use a suitable dispersant. Check with local environmental regulatory agencies for reporting requirements.

See **SECTION 8 for EXPOSURE CONTROLS and PERSONAL PROTECTION.**

SECTION 7: HANDLING & STORAGE

Handling

Do not handle near heat, sparks, or flame. Avoid contact with oxidizing agents. Use only with adequate ventilation/personal protection (SEE section 8). Avoid contact with eyes, skin and clothing. After handling, always wash hands thoroughly with soap and water. Avoid personal contact with any residue. Dispose of empty containers with care. Empty containers can contain flammable residue and explosive vapors. **Do not cut, weld, or reuse empty container.**

Storage

Store in a well-ventilated place. Keep container tightly closed. Open slowly in order to control possible pressure release. Keep cool. Store locked up. Do not store near heat, sparks, open flame, or other ignition sources. Do not store near strong oxidizing agents. Do not store in direct sunlight. Avoid storing above 120°F (49°C).

SECTION 8: EXPOSURE CONTROLS and PERSONAL PROTECTION

Engineering Controls

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

Personal Protection

Inhalation A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use. Use of an organic vapor mask or respirator is recommended.

Skin Wear chemical resistant gloves such as: rubber, nitrile, neoprene, or latex when skin contact is possible. Protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn depending on how the product is used. PPE should be cleaned thoroughly after each use.



PENMUL™ L745

Page: 4 of 8
Date Prepared: October 4, 2016
MSDS No.: 4831

Eyes Penetone recommends always wearing safety glasses as a minimum in any workplace. Conditions may warrant the use of chemical goggles and possibly a face shield. Consult your standard operating procedure or safety professional for advice. Use protective eye and face devices that comply with ANSI Z87.1-1987.

Additional Remarks

Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the hazards and/or potential hazards that may be encountered during use.

Occupational Exposure Limits

<u>Component Name</u>	<u>Source</u>	<u>Value</u>	<u>Type</u>	<u>Notation</u>
Aliphatic petroleum naphtha	ACGIH	1200 mg/m ³	TWA	Appendix H
	NIOSH	350 mg/m ³	TWA	
	OSHA Z1	1800 mg/m ³	C	15 minutes
		500 ppm	TWA	
d-Limonene (1)	ACGIH	20 ppm	TWA	dsen; A4
	NIOSH	100 ppm	TWA	
	OSHA Z1	100 ppm	PEL	

(1) No OEL has been established for d-limonene. Value given is for turpentine which has same molecular weight and similar structure.

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Appearance: clear water white to pale amber liquid liquid
Odor: mild citrus
Odor Threshold: not determined
pH: not applicable, 7-9 for 10% dilution
Melting Point / Freezing: not determined, pour point about -34°C
Boiling Point / Boiling Point Range: Initial 315°F
Flash Point: 145°F TCC
Evaporation Rate: <0.01 (butyl acetate =1)
Flammability: not applicable
Lower Flammable Limit: 0.6%
Upper Flammable Limit: 6.0%
Explosive Properties: not applicable
Vapor Pressure: about 0.05 mm Hg @ 20°C (68°F)
Relative Vapor Density (Air = 1): greater than 4
Relative Density: 0.80
Solubility (Water): forms weak emulsion
Partition Coefficient (K_{ow}): not determined
Auto-ignition temperature: not determined
Decomposition temperature: not determined
Viscosity: less than 5 centipoise at room temperature

SECTION 10: STABILITY & REACTIVITY



PENMUL™ L745

Page: 5 of 8
Date Prepared: October 4, 2016
MSDS No.: 4831

Reactivity

Not reactive.

Chemical Stability

Stable under normal conditions.

Hazardous Reactions

No hazardous reactions or under normal storage conditions. Hazardous polymerization will not occur.

Conditions to Avoid

Product is a combustible liquid. Do not store near sources of heat, sparks, open flame, or other ignition sources.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Carbon monoxide and dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Product Summary

Product is irritating to the skin and eyes and may cause a skin rash in sensitive people. Prolonged or repeated exposure may dry the skin leading to discomfort and dermatitis. Vapor/aerosol concentrations above recommended exposure levels are irritating to the eyes and respiratory tract, and may cause headaches, dizziness, drowsiness, unconsciousness and other central nervous system effects.

Acute Toxicity:

Dermal: LD50 > 2,000 mg/kg rabbit (estimated using additivity formula)

Inhalation: not data available

Oral: LC50 > 5,000 mg/kg rat (estimated using additivity formula)

Skin Corrosion/Irritation

d-Limonene causes moderate (reversible) skin irritation on guinea pigs and low (reversible) irritation on rabbits. Product as a whole may cause moderate skin irritation.

Serious Eye Damage/Irritation

d-Limonene causes mild (reversible) eye irritation on rabbits. Product as a whole may cause mild eye irritation

Sensitization - Respiratory or Skin

d-Limonene may cause skin sensitization.

Germ Cell Mutagenicity

d-Limonene: Negative for both mice and male rats. For hydrocarbon: Not expected to be a germ cell mutagen based on test data for structurally similar materials.

Carcinogenicity

Various studies have shown that d-limonene when fed at very high levels to laboratory animals have resulted in effects on the kidneys, liver, ureter, and bladder. d-Limonene is listed by IARC as Group 3: not classifiable as to its carcinogenicity to humans and is listed by ACGIH as Group 4: not classifiable as a human carcinogen. d-Limonene is listed as an equivocal tumorigenic agent by RTECS criteria.

Reproductive Toxicity

No data available.

The nonionic surfactant used in this product have produced effects in the fetus only at levels that were toxic to the parent animals.



PENMUL™ L745

Page: 6 of 8
Date Prepared: October 4, 2016
MSDS No.: 4831

Specific Target Organ Effects - Single Exposure

No data available.

Specific Target Organ Effects - Repeated or Prolonged Exposure

No data available.

Ingestion of high levels of d-limonene has caused kidney/liver effects in male rats. These results are not considered relevant to humans. Repeated dose toxicity studies of d-limonene on male and female mice had a NOEL of 1,650 mg/kg and a LOEL of 3,300 mg/kg.

Aspiration Hazard

Based upon available data and comparison to similar materials, if swallowed, may pose a lung aspiration hazard during vomiting. Lung aspiration may result in chemical pneumonitis, pulmonary edema, and damage to lung tissue or death.

SECTION 12: ECOLOGICAL INFORMATION

Product Summary

Product is a blend of hydrocarbon solvent and d-limonene and forms a weak emulsion with water. The product is expected to be toxic to aquatic organisms. (Acute aquatic toxicity category 2 by European Union classification.) The product is volatile and will evaporate to air, where it is expected to rapidly oxidize by photochemical reactions. It is not expected to partition to sediments and wastewater solids. The product is inherently biodegradable.

Ecotoxicity

Acute toxicity for aquatic vertebrates and invertebrates estimated to be 1-10 mg/l based (estimated using additivity formula)

Persistence and Degradability

Expected to be readily biodegradable. Transformation due to hydrolysis and photolysis not expected to be significant. Expected to degrade rapidly in air.

Bioaccumulative Potential

Not expected to bioaccumulate

Mobility in soil

Product expected to have low mobility

Other Adverse Effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS

Product is a nonhazardous waste under RCRA definitions. Dispose of contents/container in accordance with all applicable federal, state, and local regulations.

Note: Contaminated product, soil, water, container residues and spill cleanup materials may be hazardous wastes. Appropriate hazardous waste designation is the responsibility of the user.



PENMUL™ L745

Page: 7 of 8
 Date Prepared: October 4, 2016
 MSDS No.: 4831

SECTION 14: TRANSPORT INFORMATION

ID No.: None
Proper Shipping Name: Nonhazardous (nonregulated) material
Hazard Class: None
Packing Group: None
Label: None
Marine Pollutant: No
RQ: None
Special Precautions: None

SECTION 15: REGULATORY INFORMATION

TSCA
 The ingredients in this product are listed on the TSCA inventory.

RCRA HAZARD CLASS
 Product is a nonhazardous waste.

SARA 311/312 REPORTABLE HAZARD CATEGORIES: Immediate (Acute) Health Fire

REPORTING REQUIREMENTS (all quantities in pounds)

Component	CAS / 313 Code	Section 302 (EHS) TPQ	Section 304 EHS RQ	CERCLA RQ	Section 313	CAA 112(r) TQ	CWA / OPA
Product as a whole				(1)			
(1) This material is not subject to any special reporting under the requirements of CERCLA. CERCLA petroleum exclusion applies for this product. Contact local authorities to determine if other reporting requirements apply.							

NEW JERSEY RIGHT-TO-KNOW INFORMATION

This product contains aliphatic petroleum naphtha (CAS# 64742-47-8), d-limonene (CAS# 5989-27-5), and ethoxylated nonylphenol (CAS# 127087-87-0).

CALIFORNIA PROPOSITION 65 INFORMATION

This product does not contain any chemicals recognized by the state of California to cause cancer and/or birth defects or reproductive harm.

SCAQMD INFORMATION

Is there a photochemically reactive material present? Yes
 What is the % by volume of photochemically reactive material? About 20
 What is the VOC content? 790g/l
 What is the vapor pressure of VOC's? 0.5 mm Hg @ 20°C (68°F)



SAFETY DATA SHEET

Penetone® Corporation, 700 Gotham Parkway, Carlstadt, NJ 07072

PENMUL™ L745

Page: 8 of 8
Date Prepared: October 4, 2016
MSDS No.: 4831

SECTION 16: OTHER INFORMATION

REVISION SUMMARY

New GHS format

SUPERSEDES ISSUE DATE

July 2, 2007

HAZARD RATING SYSTEMS:

	<u>HMIS</u>	<u>NFPA</u>
HEALTH	1	1
FLAMMABILITY	2	2
REACTIVITY	0	0
	B	

KEY
4 = Severe
3 = Serious
2 = Moderate
1 = Slight
0 = Minimal

FOR ADDITIONAL PRODUCT INFORMATION, CONTACT YOUR SALES ENGINEER
FOR ADDITIONAL HEALTH/SAFETY INFORMATION, CALL 201-567-3000

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